

CONFERENCE PROGRAM OVERVIEW

IMAV will run from November 17th - 19th of 2021			
Mexico City Time	Wednesday 17th	Thursday 18th	Friday 19th
08:30 - 09:00	Inauguration		
	KEYNOTES		
09:00 - 10:00	Admiral Leopoldo Jesus Diaz Gonzalez Solorzona	Tom Richards	Nicolas Merchand
	Control systems 1	Control systems 3	Design 1
10:00 - 10:20	Flight Code Convergence: Fixedwing, Rotorcraft, Hybrid	Position controller for a flapping wing drone using UWB	Design of aeroacoustically stealth MAV rotors
10:20 - 10:40	Nonlinear model predictive control for improving range-based relative localization by maximizing observability	Onboard Time-Optimal Control for Tiny Quadcopters	A click mechanism moderates drone's flapping wing kinematics for enhanced thrust generation
10:40 - 11:00	Modeling and Identification of Multirotor Drone Dynamics for Onboard MPC Motion Planning	Fast simulation model for control law design and benchmark of high aspect ratio flexible UAVs	Propulsive efficiency of small multirotor propellers in fast forward flight
	Autonomous navigation 1	Applications	Design 2
11:00 - 11:20	Motion-based MAV Detection in GPS-denied Environments	Field report: deployment of a fleet of drones for cloud exploration	Aero-propulsive performance improvement of H2 powered UAS
11:20 - 11:40	Framework and evaluation methodology for Autonomous Drone Racing	Developing a modular tool to simulate regeneration power potential using orographic wind-hovering UAVs	Implementation of copter propeller model to the problem of energy consumption minimization during lift phase
11:40 - 12:00	A Compact Approach for Emotional Assessment of Drone Pilots using BCI.	Estimating wind using a quadrotor	3D Reconstruction based on NIR single-pixel for drone navigation under rainy condition
	KEYNOTE	PANEL	
12:00 - 13:00	Guido de Croon	General Chairs for IMAV 2014, IMAV 2017, IMAV 2019	Awards Ceremony
13:00 - 15:00	Lunch time. Time delay to adjust time zones.		
15:00 - 16:30	Replay of first Keynotes of the day		
16:30 - 17:00	Break/Video Ads.		
	PANEL	KEYNOTES	
17:00 - 18:00	General Chairs for IMAV 2016, IMAV 2018	Brandon Gilles	Rogelio Lozano
	Control systems 2	Control systems 4	Autonomous navigation 2
18:00 - 18:20	Guiding vector fields in Paparazzi autopilot	Hybrid UAV Attitude Control using INDI and Dynamic Tilt-Twist	Indoor Visual Semantic SLAM improves VIO and RGBD for narrow space navigation
18:20 - 18:40	Immersion and Invariance Based Trajectory Tracking Control of an Aerial Manipulation System	Sliding-mode based Thrust Vector Control for Aircrafts	Decentralized Trajectory Generation Technique for Multiple Unmanned Multicopter Systems in Cluttered Environments
18:40 - 19:00	Extended Incremental Non-linear Control Allocation on the TU Delft Quadplane	Quaternion Based Attitude Sliding Mode Control with Disturbance Rejection Observer for a quadrotor	Texture Classification for Object Detection in Aerial Navigation using Transfer Learning and Wavelet-based Features
19:00 - 19:20			Closure Ceremony